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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,353	08/09/2001	Daniel M. Dias	FR91990105US1	4341

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EXAMINER	
DIVECHA, KAMAL B	

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,353	DIAS ET AL.	
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/25/2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Claims 1-8 are re-presented for examination.

1. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicant has amended claims 1, 2 and 4. Therefore the examiner withdraws all previous claim objections and specification objections and 112 2nd paragraph rejections.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1 recites the limitation "load balancing instructions" and "said instructions" in the claim. There is insufficient antecedent basis for this limitation in the specification.
- Claims 2-8 are rejected due to their dependency on claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being obvious over Brendel et al. (U. S. Patent No. 5,774,660) in view of Starnes et al. (U. S. Patent No. 6,510,469 B1).

Brendel discloses a method for enhancing load controlling of a web site including a plurality of individual servers (figure 6; col. 2 L54-67) and a network Control Scheduler (NCS) (figure 12; column 18, lines 11-12), said Web site using the Hyper Text Transport Protocol (HTTP) (figure 12), said method comprising the steps of: in any one server out of said plurality of individual servers (column 15, line 12; fig. 6 and fig. 8 item #56 and #70), however, Brendel does not explicitly teach the method comprising the steps of: issuing load balancing instructions to said NCS; receiving said instructions in said NCS from said any one server; and complying with said instructions upon receipt.

Starnes, from the same field of endeavor, explicitly discloses the method wherein: a server sends the appropriately formatted message to the load balancer (read as server issuing load

balancing instruction to a scheduler or load balancer, col. 14 L29-34); receiving said instructions in said NCS from said any one server (col. 14 L34-36; L44-47); and complying with said instructions upon receipt (col. 14 L34-36; L50-53). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Starnes as stated above with the method and system of Brendel in order to issuing instructions to said NCS, receiving said instructions in said NCS from said any one server, and complying with said instructions.

One of ordinary skilled in the art would have been motivated because load balancers are provided to enable a component to communicate efficiently with multiples instances of another component and to load balance the computational and operational processing among them (Starnes, col. 13 L44-48).

As per claim 2, Brendel in view of Starnes discloses the method as in claim 1 wherein step of issuing instructions includes the step of passing said instructions to said NCS in a NCS-control HTTP header (col. 14 L29-36 and col. 2 L23-28), said passing step further including the steps of: including directives to be obeyed by said NCS (col. 14 L29-36: a message that includes a READY directive or instruction), however, Brendel in view of Starnes does not include the step of optionally including a filter (such as URL, cookie and headers as disclosed by applicant on page 8) to limit the scope of application of said directives. But it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to optionally include the filter such as cookies, URLs or headers with the instruction or a formatted message. One of ordinary skilled in the art would have been motivated because it would have enabled load

balancer to filter the traffic or packets and identify the resources based upon the packets header parameters or cookies.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being obvious over Brendel et al. (U. S. Patent No. 5,774,660) in view of Starnes et al. (U. S. Patent No. 6,510,469 B1), and further in view of Pavan et al. (U. S. Patent No. 6,801,943 B1).

As per claim 3, Brendel in view of Starnes discloses the method as in claim 2 wherein said directives includes: NCS-queuing directives (col. 14 L5-53), however, Brendel in view of Starnes does not disclose the directives such as: flow-control directives and sharing directives. Pavan, from the same field of endeavor, discloses a flow control directive (col. 4 L51-54: read scheduling of packets as flow control mechanism); sharing directives (col. 4 L5-6: scheduler capable of to schedule the use of shared resources); and NCS-queuing directives (col. 4L14-20 and fig. 6 and col. 5 L23-50). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Pavan and combine with the system and method of Brendel in view of Starnes in order to include the flow-control directive, sharing directive, and NCS-queuing directive. One of ordinary skilled in the art would have been motivated because it would have controlled and load balanced the network traffic and improved the network congestion.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being obvious over Brendel et al. (U. S. Patent No. 5,774,660) in view of Starnes et al. (U. S. Patent No. 6,510,469 B1), and further in

view of Pavan et al. (U. S. Patent No. 6,801,943 B1), and further in view of Dutta et al. (U. S. Patent No. 6,546,423 B1).

Neither Brendel, Starnes nor Pavan disclose the method as in claim 3 wherein said flow-control directives include an increase-rate directive to require said NCS to increase a rate at which requests to said any one server are sent; a decrease-rate directive to require said NCS to decrease a rate at which requests to said any one server are sent; an increase-window directive to require said NCS to increase a number of jobs allowed to be simultaneously processed in said any one server; and a decrease-window directive to require said NCS to decrease a number of jobs allowed to be simultaneously processed in said any one server.

Dutta, from the same field of endeavor, discloses a method wherein server sends a message to the firewall (read as load balancer) to either generally reduce the amount of traffic being sent to server or else redirect the traffic to another server (read as a decrease-window directive, col. 5 L10-30). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Dutta to include an increase-rate directive, decrease-rate directive and an increase-window directive and combine the modification with the method and system of Brendel in view of Starnes, and further in view of Pavan.

One of ordinary skilled in the art would have been motivated because this would have reduced the network congestion at the server, enhanced the reliable flow of information and improved the network latency by controlling the rate and amount of traffic directed to a certain server.

9. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being obvious over Brendel et al. (U. S. Patent No. 5,774,660) in view of Starnes et al. (U. S. Patent No. 6,510,469 B1), and further in view of Pavan et al. (U. S. Patent No. 6,801,943 B1), and further in view of Dutta et al. (U. S. Patent No. 6,546,423 B1), and in further view of Colby et al. (U. S. Patent No. 6,625,643 B1).

As per claim 5, neither Brendel, Starnes, Pavan nor Dutta disclose the method wherein sharing directives include: a share directive aimed at enabling an information sharing within all members of said plurality of individual servers and said NCS; and a clear directive aimed at clearing a previous said information sharing.

Colby discloses a broadcast manager capable of sending and receiving system messages comprising: a share message for enabling information sharing within all members (col. 3 L32-38, col. 4L54-55, col. 8 L37-51; col. 14 L45-50); and a clear message for stopping or canceling the shared information (col. 15 L15-20; col. 4L43-46). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Colby as stated above with the method and system of Brendel, Starnes, Pavan and Dutta in order to enable information sharing within all members of plurality of servers and clearing a previous said information sharing.

One of ordinary skilled in the art would have been motivated because it would have improved the network latency, reduced or avoided congestion and would have provided higher throughput.

As per claim 6, Brendel in view of Starnes and further in view of Pavan discloses NCS-queuing directives including: a lock directive aimed at locking resources identified by said filter

(Starnes, read as "Not Ready" instruction message; Pavan, read as HOLD directive, col. 5L18-42, fig. 2 item #38) and an unlock directive aimed at releasing previously locked said resources (Starnes, read as "Ready" message; col. 14 L26-54; Pavan, read as RELEASE directive, col. 5L18-42, fig. 2 item #34). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Starnes as stated above with system and method of Brendel, Pavan, Dutta and Colby. One of ordinary skilled in the art would have been motivated because it would have avoided the network congestion by controlling the service requests in a service queued.

As per claim 7 and 8, they do not teach or further define over the limitations in claims 1-6. Therefore, claims 7 and 8 are rejected for the same reasons as set forth in claims 1-6.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER